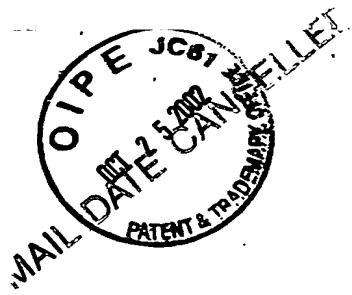


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301 caaaaataatc tgagatgcat gaaaggcaaa cattcaactag agctgaaatt tccctaagtc
361 tatgcaggga taagtagcat atttgacctt caccatgatt atcaagcact tctttggAAC
421 tgggttgggt ctgctggcct ctaccatat cttctctcta gattgaaac tgattatctt
481 ccagcaaaga caagtgaatc aagaaagttt aaaactcttg aataagttgc aaaccttgtc
541 aattcagcag tgttctaccac acaggaaaaa ctttctgctt cctcagaagt ctttgagtcc
601 tcagcagtagc caaaaaggac acactctggc cattctccat gagatgcttc agcagatctt
661 cagcctcttc agggcaaata tttctctgga tgggttggag gaaaaccaca cggagaaatt
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1081 tagtacaatc acattgttt gatTTTGTGt atatataat ttatctgtgt tttaagattg
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1201 a

Figure 1

09881050 - 112502



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Figure 2

09/001050 - 11/25/02

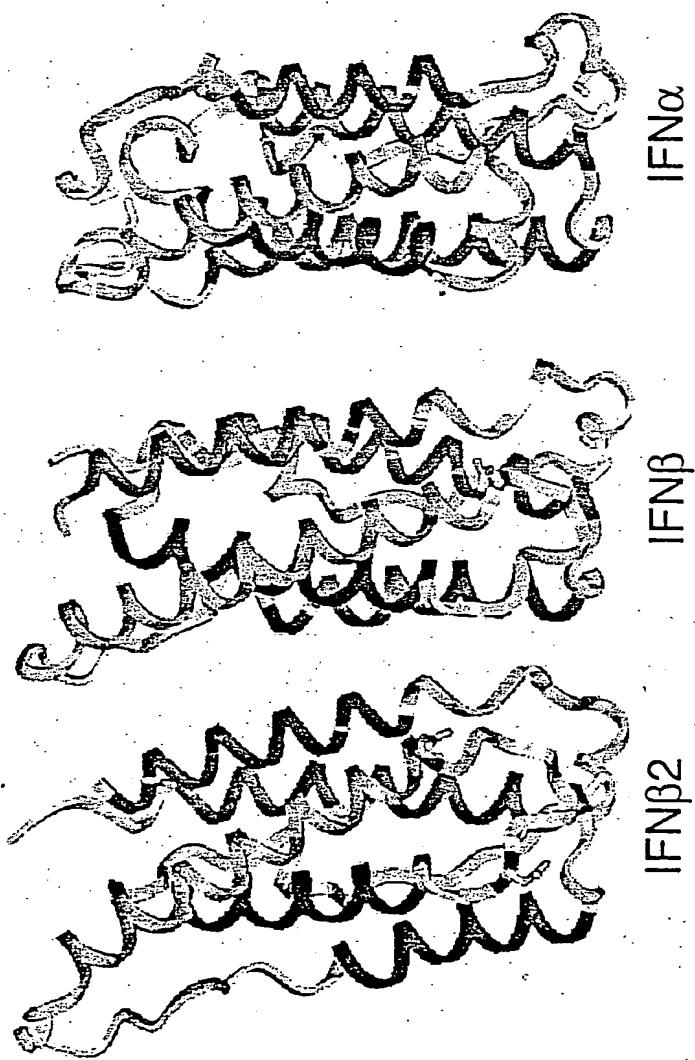


Figure 3



1

IFNB2
IFNB
IFNalpha8
IFNalpha7
IFNalpha6
IFNalpha5
IFNalpha4b
IFNalpha21
IFNalpha2
IFNalpha16
IFNalpha14
IFNalpha13
IFNalpha10
IFNomega1
IFNgamma
Consensus

(1) MIEKHF GTVLVLLA STTIFS L DLKLI IF QQ RQ V N Q E S E K I L N K E Q - T E S I Q Q C E P H R K N E L L P O K S L S P
(1) M TNK C L E Q I A L L C F S T T E A L S M S Y N L L G F L Q R S S N F Q C Q K I L W Q L N G R E E Y - - C L K D R M N E D I P E E K P O L
(1) M A L T F Y L L V A L V L V L S Y K S I C S L G C D L P Q T H S - L G N R R A L I L L A Q M R - R I S P F S C L K D R H D F E F P Q E E F D G
(1) M A R S F S L L M V L V L S Y K S I C S L G C D L P Q T H S - L G H P R T M M L L A Q M R - R I S L F S C L K D R H D F E F P Q E E F D G
(1) M A E P F A L L M A L V L V L S C K S C S L D C D L P Q T H S - L S N R R T L M M A Q M G - R I S P F S C L K D R H D F E G P Q E E F D G
(1) M A L P F V L L M A L V L V L N C K S I C S L G C D L P Q T H S - L S N R R T L M M A Q M G - R I S P F S C L K D R H D F E G P Q E E F D G
(1) M A L S F S L L M A V L V L S Y K S I C S L G C D L P Q T H S - L G N R R A E I L L A Q M G - R I S H F S C L K D R H D F G G P Q E E F D G
(1) M A L S F S E L M A V L V L S Y K S I C S L G C D L P Q T H S - L G N R R A L I L L A Q M G - R I S P F S C L K D R H D F G F P Q E E F D G
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(1) M A L S F S L L M A V L V L S Y K S I C S L G C D L P Q T H S - L G N R R A L I L L A Q M G - R I S H F S C L K D R H D F G F P Q E E F D G
(1) M A L P F A L L M A L V L V L S C K S C S L G C N L S Q T H S - L N N R R T L M M A Q M R - R I S P F S C L K D R H D F E F P Q E E F D G
(1) M A S P F A L L M V L V L S C K S C S L G C D L P E T H S - L D N R R T L M L L A Q M S - R I S P P S C L M D R H D F G F P Q E E F D G
(1) M A L S F S L L M A V L V L S Y K S I C S L G C D L P Q T H S - L G N R R A L I L L G Q M G - R I S P F S C L K D R H D F R I P Q E E F D G
(1) M A L F P L L A A L V M T S Y S P V G S L G C D L P Q N H G - L L S R N T L V L L H Q M R - R I S P E L C L K D R R D F R F P Q E M V K G
(1) M K Y T - S Y I L A F Q L C I V L G S L G C Y C D P V K E - - - A E N L K K Y F N A G - - - H - S D V A D N G T L - - - L G I L K
(1) M A L F L L M A L L V L S K S C L G C D L P Q T H S L N R R L L A Q M R - R I S P F S C L K D R H D F P Q E E F D G

70

IFNB2
IFNB
IFNalpha8
IFNalpha7
IFNalpha6
IFNalpha5
IFNalpha4b
IFNalpha21
IFNalpha2
IFNalpha16
IFNalpha14
IFNalpha13
IFNalpha10
IFNomega1
IFNgamma
Consensus

(1) M A L F L L M A L L V L S K S C L G C D L P Q T H S L N R R L L A Q M R - R I S P F S C L K D R H D F P Q E E F D G

71

(70) Q Q V Q K G H T I A I L H E M I Q Q I F S L I F R A N I S L D G W E E N H T E K F L I Q L H Q Q L E Y L E A L M G L E A K L S G T I G S D N
(69) Q Q F Q K E D A A L T I Y E M L O N I F A I F R Q D S S T G W N E T I V E N L L A N M Y H Q I N H H L K T V L E E K I E K E D F T R G K L M
(69) K Q F Q K A Q A I S V L H E M I Q Q T F N L F S T K D S S A A L D E T L L D E F Y I E L D Q Q L N D L E S C V M Q E V G V I E S P L M Y E D
(69) H Q F Q K T Q A I S V L H E M I Q Q T F N L F S T K D S S A A W E Q S I L L E K P S T E L Y Q Q L N D L E A C V I Q E V G V E E T P L M N E D
(69) N Q F Q K A Q A I S V L H E M I Q Q T F N L F S T K D S S A A W E Q S I L L E K P S T E L Y Q Q L N D L E A C V I Q E V G V E E T P L M N V D
(69) H Q F Q K T Q A I S V L H E M I Q Q T F N L F S T K D S S A A W E Q S I L L E K P S T E L Y Q Q L N D L E A C V I Q E V G V E E T P L M N V D
(69) N Q F Q K A Q A I S V L H E M I Q Q T F N L F S T K D S S A A W E Q S I L L E K P S T E L Y Q Q L N D L E A C V I Q E V G V E E T P L M N V D
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(68) N Q F Q K A E T I P V L H E M I Q Q I F N L F S T K D S S A A W D E T L L D K E Y I E L F Q Q L N D L E A C V T Q E V G V E E T P L M K E D
(69) N Q F Q K A Q A I S V L H E M I Q Q T F N L F S T K D S S A A W D E T L L D K E Y I E L F Q Q M N D L E A C V I Q E V G V E E T P L M N E D
(69) N Q F Q K A Q A I S V L H E M I Q Q T F N L F S T K D S S A A W D E T L L D K F C T E L Y Q Q L N D L E A C V M O E R V G E T P L M N A D
(69) N Q F Q K A Q A I S V L H E M I Q Q T F N L F S T E D S S A A W E Q S I L L E K P S T E L Y Q Q L N D L E A C V I Q E V G V E E T P L M N E D
(69) S O L O K A H V M S V L H E M I Q Q I F S L I F T E R S S A A W N M T L L D Q L H G L H Q Q L O L T C L L O V V G E G E S A G A I S S
(58) N W K E E S D R K I M Q S C I V S F Y F K L F K N F K D - - - D Q S - E Q K S V E T I K E D M N - W K F F N S N K K R D D F E K I T N Y
(71) N Q F Q K A Q A I S V L H E M I Q Q T F N L F S T K D S S A A W D E L L D K F T E L Y Q Q L N D L E A C V I Q E V G V E E T P L M N D

210

IFNB2
IFNB
IFNalpha8
IFNalpha7
IFNalpha6
IFNalpha5
IFNalpha4b
IFNalpha21
IFNalpha2
IFNalpha16
IFNalpha14
IFNalpha13
IFNalpha10
IFNomega1
IFNgamma
Consensus

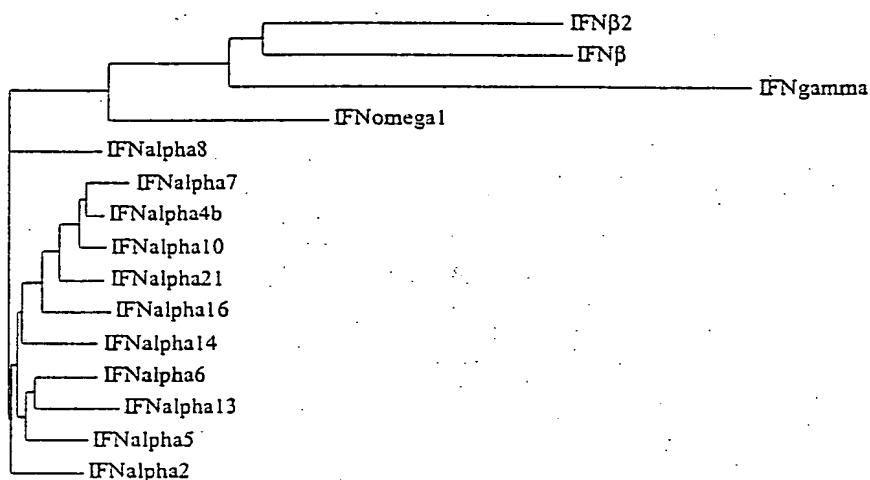
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(139) S S L H L K R Y Y G R I L H Y L K - A K E Y S H C A W T H V R V E I I R N E Y F I N R I T G Y I R N
(139) S I L A V R K Y F O R I T L Y L T - E K K Y S S C A W E V V R A E I M R S F S L S I N I Q R L K S K E
(139) S I L A V R K Y F O R I T L Y M - E K K Y S P C A W E V V R A E I M R S F S F S T N I K K G L R R K D
(139) S I L A V R K Y F O R I T L Y T - E K K Y S P C A W E V V R A E I M R S F S F S T N I Q E R L R R K E
(139) S I L I T V R K Y F O R I T L Y L T - E K K Y S P C A W E V V R A E I M R S F S I S A N I Q E R L R R K E
(139) S I L A V R K Y F O R I T L Y L T - E K K Y S P C A W E V V R A E I M R S F S F S T N I Q E R L R R K D
(139) S I L A V R K Y F O R I T L Y L T - E K K Y S P C A W E V V R A E I M R S F S F S T N I Q E R L R R K E
(139) S I L A V R K Y F O R I T L Y L T - E K K Y S P C A W E V V R A E I M R S F S F S T N I Q E R L R R K E
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(139) P A L T E R R Y F O G I R V Y L K - E K K Y S D C A W E V V R M E I M K S L F L S T N M Q E R L R S K D R D L G S S
(122) S V T D I N V Q R K A I H E L I Q V M A E L S P A A K T G R - - - K R S Q M L - - - F R G R P A S Q
(141) S I L A V R K Y F O R I T L Y L E K K Y S P C A W E V V R A E I M R S F S T N I Q R L R K

Figure 4

090041050 - 142504
O P E JC6
NOV 25 2002
PATENT & TRADEMARK OFFICE

MAIL DATE 25 NOV 2002
O P E JC6
PATENT & TRADEMARK OFFICE

Protein Level Comparison



Nucleotide Level Comparison

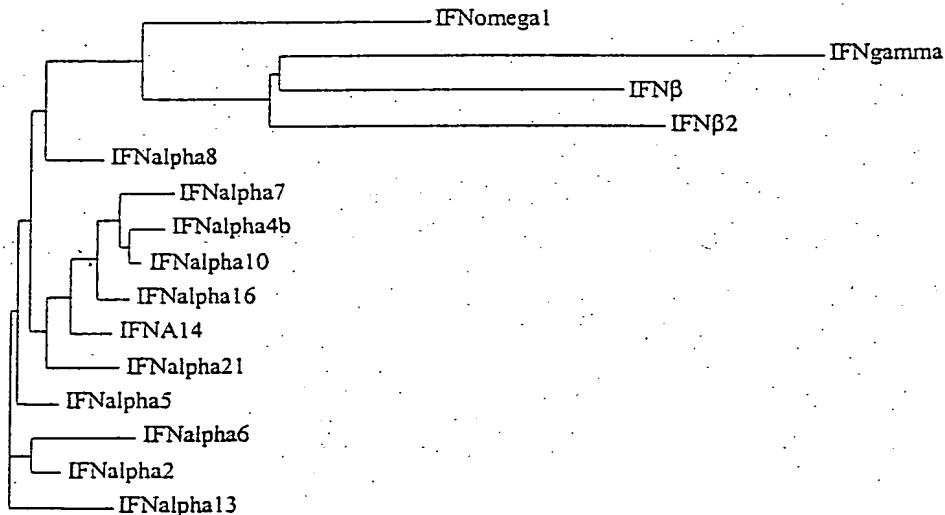


Figure 5

02001050 - 142604

NOV 25 2002

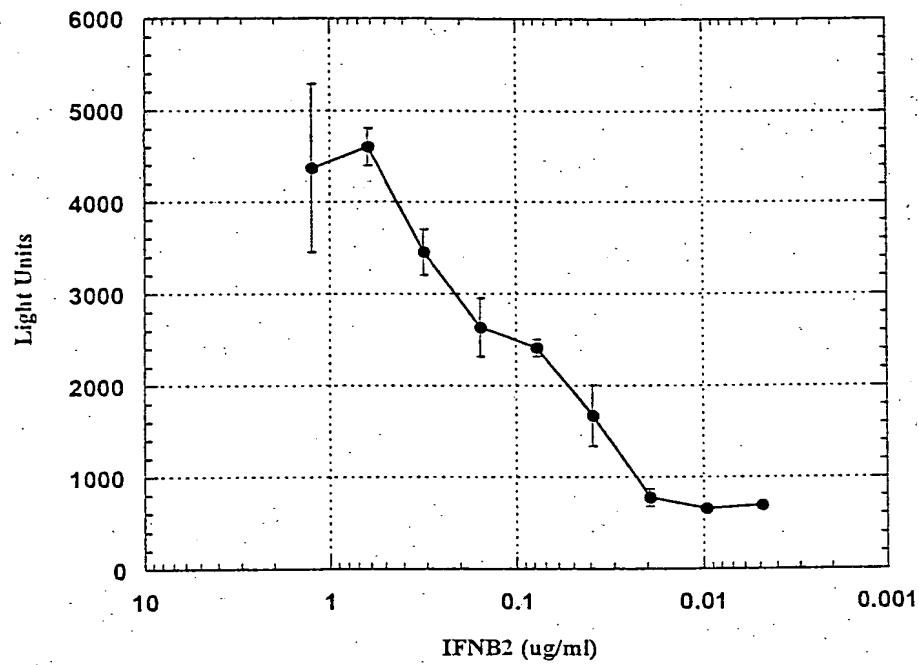


Figure 6

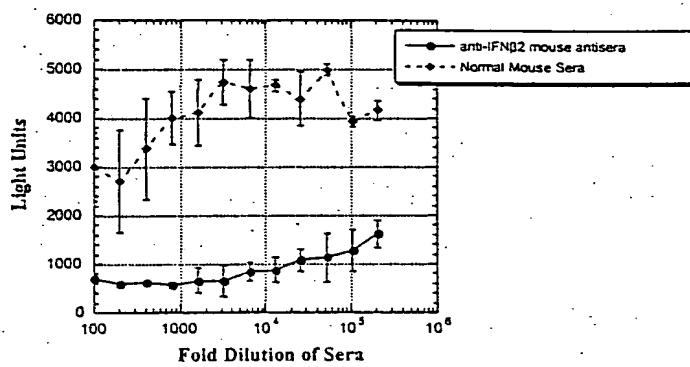


Figure 7



090001050 . 111502A

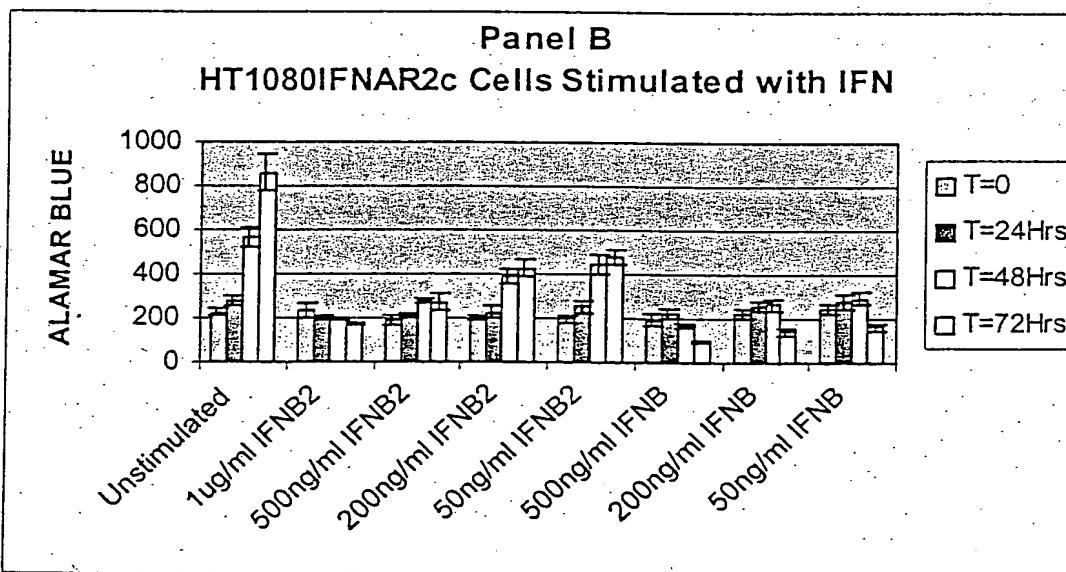
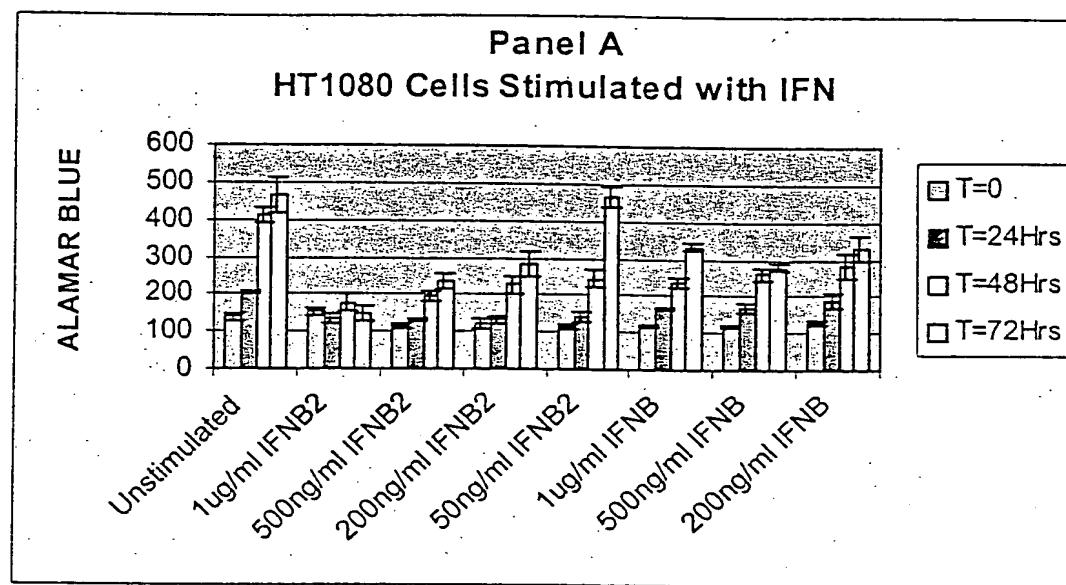


Figure 8

09001050 - 112502

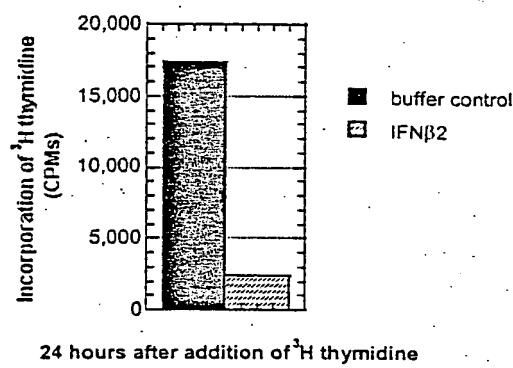
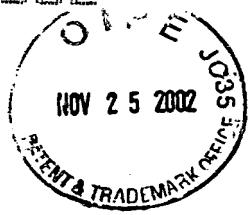


Figure 9

090001050 - 142502

NOV 25 2002
PATENT & TRADEMARK OFFICE
U.S. DEPARTMENT OF COMMERCE

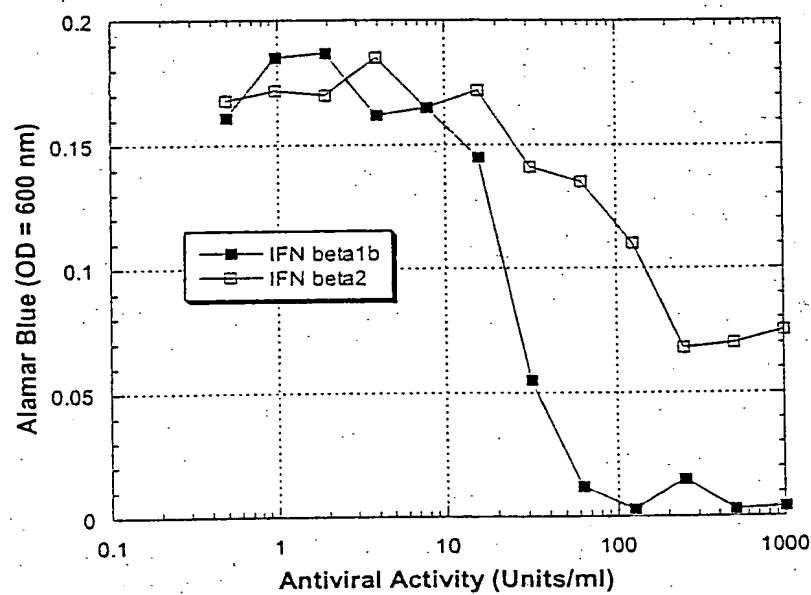


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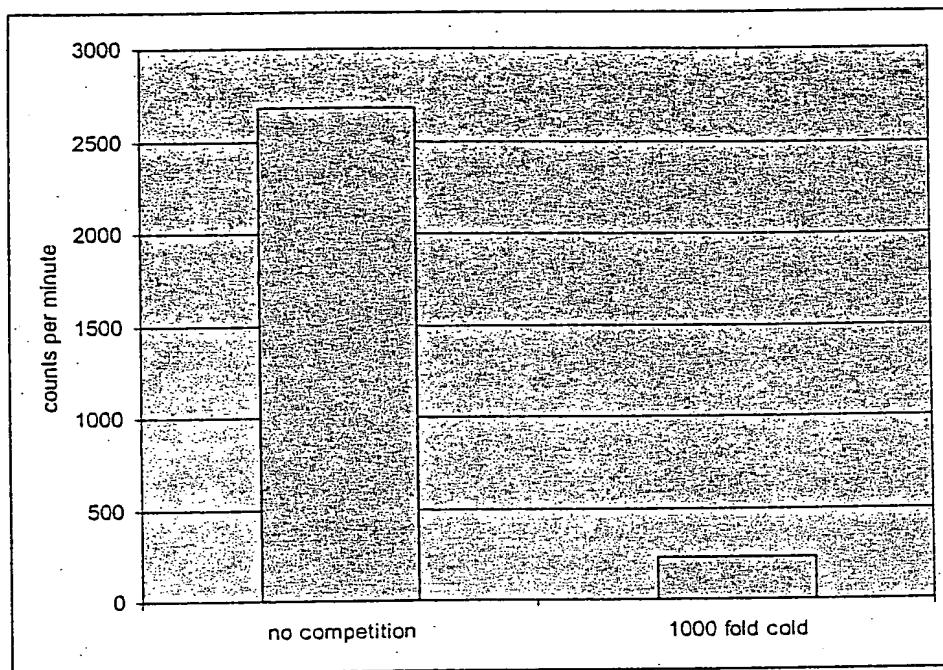
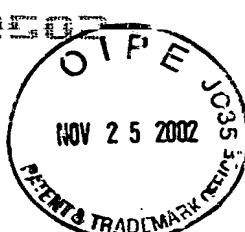
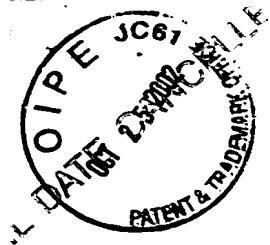


Figure 11



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181 acacaatagg gaaatggaga aaatgtactc tgaacaccat gaaaaggaa cctgaaaatc
241 taatgtgtaa acitggagaa atgacattag aaaacgaaaag ctacaaaaga gaacactctt
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Figure 12

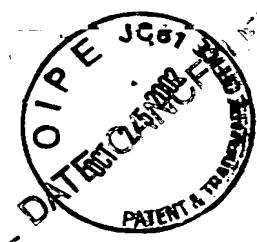
09984050 - 112500



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541 aattcagcag tgtctaccac acagggAAAAA ctttctgctt cctcagaAGT ctttgagtcc
601 ttaactgtac caaaaaggac acactctggc cattcttcat gagatgct

Figure 13

09861050 - 11250P



***MIIKHFFGTVLVLLASTTIFSSDLKLIIFFQQRQVNQESLKLLNKLQTLSIQ
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Figure 14

09881050 - 11260P
O T P
NOV 25 2002
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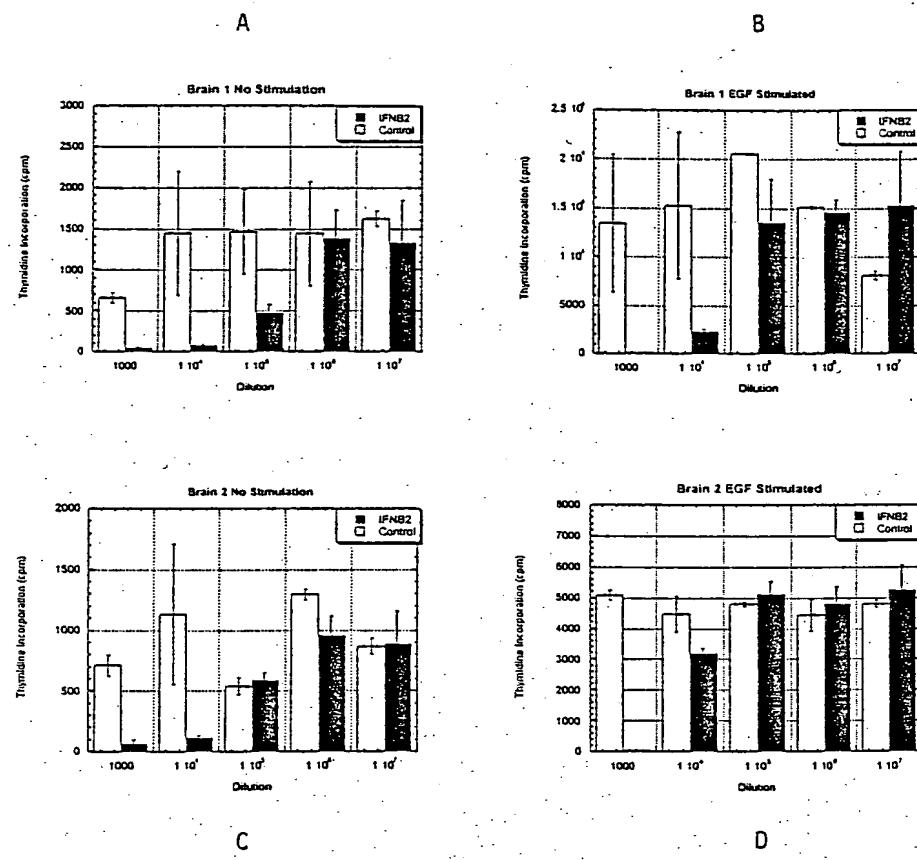
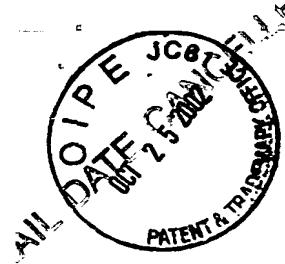


Figure 15